

ABSTRACT OF THE INVENTION

A single-piece top surface display and integrated front cover for an electronic device. In one embodiment, the cover comprises a thin, flexible, transparent layer coupled with a supporting structure. The flexible layer is supported above a display screen which is coupled with pressure activated sensors located under the display screen. The cover is dust-free, waterproof, and has a flat outer surface that is free of any steps or indentations. Users input data by applying pressure on the cover which causes the display screen to deflect and activate the sensors. The pressure exerted on the sensors is triangulated to register the position of the user input. In another embodiment, the cover is transparent, rigid, and directly contacts the pressure activated sensors which are located in front of the display screen or in the housing behind it. When pressure is applied to the cover, the cover deflects and activates the sensors. In both embodiments, an accelerometer identifies valid input events.